



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/995,028

11/26/2001

Chandrasekharan Seetharaman

BEA920010028US1

9618

30011

7590

07/13/2009

LIEBERMAN & BRANDSDORFER, LLC
802 STILL CREEK LANE
GAITHERSBURG, MD 20878

EXAMINER

NGUYEN, THU HA T

ART UNIT

PAPER NUMBER

2453

MAIL DATE

DELIVERY MODE

07/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/995,028	Applicant(s) SEETHARAMAN ET AL.	
	Examiner THU HA T. NGUYEN	Art Unit 2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-8,12-14,17,18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-8,12-14,17,18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims **1, 5-8, 12-14, 17-18 and 20** are presented for examination.
- 2.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 5-8, 12-14, 17-18 and 20, filed on November 07, 2007, have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claims 1, 5, 6, 8, 12-13 and 17-18 objected to because of the following informalities:

5. Claims 1, 5-6, 8, 12 and 18 recited "shared storage media" and "said storage media". There is inconsistent language using in these claims. Appropriate correction is required.

6. Claim 1 recited "said node identifier of said label". There is lack of antecedent basis for this limitation. Appropriate correction is required.

7. Claim 1 recited "said access rights". There is lack of antecedent basis for this limitation in this claim. Appropriate correction is required.

8. Claim 5 recited "said storage media cluster identifier" There is lack of antecedent basis for this limitation in this claim. Appropriate correction is required.

9. Claims 13 and 17 recited "said media". There is lack of antecedent basis for this limitation in this claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 6-8, 13-14, and 18 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Imamura et al.** (hereinafter Imamura) U.S. Patent No. 6,604,153, in view of **Blumenau et al.** (hereinafter Blumenau) U.S. Patent No. 6,845,395.

12. As to claim 1, **Imamura** teaches a method for accessing storage media comprising:

reading a storage media label (security information) in response to an access request to storage media [see column 5, lines 50-col. 6, line 6];

obtaining a hardware identifier (device identifier) from said storage media [see column 5, line 66-col. 6, line 13];

comparing said hardware identifier (device identifier) of said storage media with a hardware identifier field (device identifier) of said label (security information) [see column 6, lines 7-24];

Art Unit: 2453

establishing access rights to said storage media [see column 6, lines 7-11] the step of establishing access rights is responsive at least in part to a hard attribute (device identifier) of said shared storage media [see column 5, lines 62-65] and includes creating said label including said hard attribute, a type field, and a node identifier field [see column 5, lines 1-19];

determining whether to allow access to said storage media by matching a node identifier with said node identifier of said label (col. 5, lines 20-29, line 66-col. 6, line 19);

allowing access to said storage media in response to said match of said node identifier with said node identifier of said label (col. 6, lines 20-24); and

accessing said storage media according to said access rights [see column 6, lines 12-15].

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura**'s storage media over a network because doing so would provide an effective system to manage access control in a storage network.

13. Regarding claim 6, **Blumenau** teaches that a label includes an activity data field and an activity data counter field for protecting ownership of said storage media (column 20, lines 20-51).

14. Regarding claim 7, **Blumenau** teaches wherein the computer environment is a SAN (figure 3).

15. Regarding claims 8, **Imamura** teaches a computing environment comprising:

shared storage media (column 5, line 12-29);

said storage media having a label and a hard attribute (see column 5, line 12-29, column 5, lines 50-col. 6, line 6);

said label having a node identifier field (see column 5, line 66-col. 6, line 13);

an access manager to read said label in response to a storage media access request from one of said nodes, to obtain a hardware identifier from said storage media, and to compare a hardware identifier of said storage media with a hardware identifier field in said label (see column 5, lines 50-col. 6, line 24);

said manager to establish access rights of said nodes to said storage media, responsive in part to a hard attribute of said shared storage media, and to create said label including said hard attribute, a type field, and a node identifier field (see column 5, lines 1-19, column 6, lines 7-11);

Art Unit: 2453

said manager to allow access to said storage media responsive to a match of a node identifier with said hardware identifier of said label (col. 6, lines 20-24); and

said manager to allow access to said storage media based upon said match (see column 6, lines 12-15).

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura**'s storage media over a network because doing so would provide an effective system to manage access control in a storage network.

16. Regarding claim 13, **Blumenau** teaches wherein said label further comprises an activity data field and an activity data counter field to protect ownership of said media (column 20, lines 20-51).

17. Regarding claims 14, **Imamura** teaches an article comprising:
a computer-readable recordable data storage medium (column 5, line 12-29);

means in the medium for reading a storage media label in response to an access request to storage media (column 5, lines 50-col. 6, line 6);

means in the medium for obtaining a hardware identifier from said storage media (column 5, line 66-col. 6, line 13);

means in the medium for comparing said hardware identifier of said storage media with a hardware identifier field of said label (column 6, lines 7-24);

means in the medium for accessing storage media, said storage media having a hard attribute including a label having a type field and a node identifier field (column 5, lines 1-19, column 6, lines 7-11);

means in the medium for determining whether to allow access to said storage media by matching a node identifier to a node identifier of said label (col. 5, lines 20-29, line 66-col. 6, line 19);

means in the medium for allowing access to said storage media in response to match of said node identifier of said requesting node with said node identifier of said label (col. 6, lines 20-24); and

means in the medium for providing access to said storage media based upon said match (column 6, lines 12-15).

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura's** storage media over a network because doing so would provide an effective system to manage access control in a storage network.

18. Regarding claims 18, **Imamura** teaches a method for safely accessing shared storage media in a computing environment having two or more nodes comprising:

writing a label, said label being determined at least in part by a hardware identifier of said storage media, said hardware identifier including a node identifier field (column 5, line 12-29, column 5, lines 50-col. 6, line 13);

reading said label in response to an access request to said storage media (column 5, lines 50-col. 6, line 6);

obtaining said hardware identifier from said storage media (column 5, line 66-col. 6, line 13);

comparing said hardware identifier of said storage media with a hardware identifier field of said label, including comparing a node identifier with a node identifier in said label (column 5, lines 1-19 and column 6, lines 7-24);

Art Unit: 2453

allowing access to said storage media if said label indicates said storage media is node-owned and said node identifier in said label matches a node identifier (col. 5, lines 20-29, line 66-col. 6, line 24); and

accessing said storage media according to said label (column 6, lines 12-15).

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura**'s storage media over a network because doing so would provide an effective system to manage access control in a storage network.

19. Claims 5, 12, 17 and 20 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Imamura et al.** (hereinafter **Imamura**) U.S. Patent No. 6,604,153, in view of **Blumenau et al.** (hereinafter **Blumenau**) U.S. Patent No. 6,845,395, further in view of **Hirayama** U.S. Pub. No. 2002/0133675.

Art Unit: 2453

20. Regarding claim 5, **Imamura** teaches the method of claim 1, further comprising said label having a identifier; and further comprising determining whether to allow access to said storage media by matching said identifier to said storage media identifier (col. 5, lines 20-29, line 66-col. 6, line 19);

allowing access to said storage media in response to said match of said identifier with said storage media identifier (col. 6, lines 20-24); and

accessing said storage media according to said access rights (column 6, lines 12-15).

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media and a cluster. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura's** storage media over a network because doing so would provide an effective system to manage access control in a storage network.

Hirayama teaches mapping data of files managed by the cluster file system (paragraphs 0020-0021). It would have been obvious to one of ordinary skill in the art

Art Unit: 2453

to modify the teaching of **Imamura- Blumenau** by including a cluster as disclosed by **Hirayama** because doing so would provide an access files is processed as an access to main memory.

21. Regarding claim 12, **Imamura** teaches wherein said label further includes a identifier field (col. 5, lines 20-29, line 66-col. 6, line 19); and further comprising said manager to allow access to said storage media responsive to a match of a identifier with a identifier of said label (col. 6, lines 20-24).

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media and a cluster. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura's** storage media over a network because doing so would provide an effective system to manage access control in a storage network.

Hirayama teaches mapping data of files managed by the cluster file system (paragraphs 0020-0021). It would have been obvious to one of ordinary skill in the art

Art Unit: 2453

to modify the teaching of **Imamura- Blumenau** by including a cluster as disclosed by **Hirayama** because doing so would provide an access files is processed as an access to main memory.

22. Regarding claim 17, **Imamura** teaches said label having a cluster identifier field, wherein said managing means grants a positive access request to a node in a cluster responsive to confirmation of cluster ownership of said media (column 10, lines 22-34).

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media and a cluster. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura's** storage media over a network because doing so would provide an effective system to manage access control in a storage network.

Hirayama teaches mapping data of files managed by the cluster file system (paragraphs 0020-0021). It would have been obvious to one of ordinary skill in the art

Art Unit: 2453

to modify the teaching of **Imamura- Blumenau** by including a cluster as disclosed by **Hirayama** because doing so would provide an access files is processed as an access to main memory.

23. Regarding claim 20, **Imamura** teaches allowing access to said media if a type field in said label indicates said storage media is identifier in said label matched a identifier of said requesting node (column 10, lines 22-34).

Imamura teaches an access right between data storage device and memory medium. However, **Imamura** does not explicitly teach an access rights of said [two or more] nodes to said storage media and a cluster, allow to access of a node in a cluster and storage media is cluster-owned.

. However, it was well known in the art to provide two or more nodes access to storage media over a network, as evidenced by **Blumenau**.

Blumenau teaches a system that allows two or more nodes (12, 14) to access to storage media (38) based on matching identifier of host with configuration data for the host [see, e.g., figs. 1A-C, 3, col. 9, line 7-col. 10, line 67]. It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura** by providing two or more nodes as disclosed by **Blumenau** with access to **Imamura's** storage media over a network because doing so would provide an effective system to manage access control in a storage network.

Art Unit: 2453

Hirayama teaches allow to access of a node in a cluster and storage media is cluster-owned (paragraphs 0020-0021). It would have been obvious to one of ordinary skill in the art to modify the teaching of **Imamura- Blumenau** by including a cluster as disclosed by **Hirayama** because doing so would provide an access files is processed as an access to main memory.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (571)

Art Unit: 2453

272-3989. The examiner can normally be reached Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne, can be reached at (571) 272-4001.

The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/THUHA T. NGUYEN/

Primary Examiner, Art Unit 2453